

## § 65.85

## 40 CFR Ch. I (7–1–10 Edition)

§ 65.83(a)(4) or to a vapor balance system as provided in § 65.83(a)(3).

(b) *Control device operation.* Whenever regulated material emissions are vented to a control device used to comply with the provisions of this subpart, such control device shall be operating.

(c) *Tank trucks and railcars.* The owner or operator shall load regulated material only into tank trucks and railcars that meet one of the following two requirements and shall maintain the records specified in § 65.87:

(1) Have a current certification in accordance with the U.S. Department of Transportation (DOT) pressure test requirements of 49 CFR part 180 for tank trucks and 49 CFR 173.31 for railcars; or

(2) Have been demonstrated to be vapor-tight within the preceding 12 months as determined by the procedures in § 65.85(a). Vapor-tight means that the pressure in a truck or railcar tank will not drop more than 750 pascals (0.11 pound per square inch) within 5 minutes after it is pressurized to a minimum of 4,500 pascals (0.65 pound per square inch).

(d) *Pressure relief device.* The owner or operator of a transfer rack subject to the provisions of this subpart shall ensure that no pressure relief device in the loading equipment of each tank truck or railcar shall begin to open to the atmosphere during loading. Pressure relief devices needed for safety purposes are not subject to paragraph (d) of this section.

(e) *Compatible system.* The owner or operator of a transfer rack subject to the provisions of this subpart shall load regulated material only to tank trucks or railcars equipped with a vapor collection system that is compatible with the transfer rack's closed vent system or process piping.

(f) *Loading while systems connected.* The owner or operator of a transfer rack subject to this subpart shall load regulated material only to tank trucks or railcars whose collection systems are connected to the transfer rack's closed vent systems or process piping.

### § 65.85 Procedures.

(a) *Vapor tightness.* For the purposes of demonstrating vapor tightness to determine compliance with § 65.84(c)(2),

the following procedures and equipment shall be used:

(1) The pressure test procedures specified in Method 27 of appendix A of 40 CFR part 60; and

(2) A pressure measurement device that has a precision of  $\pm 2.5$  millimeters of mercury (0.10 inch) or better and that is capable of measuring above the pressure at which the tank truck or railcar is to be tested for vapor tightness.

(b) *Engineering assessment.* Engineering assessment to determine if a vent stream is halogenated or flow rate of a gas stream includes, but is not limited to, the following examples:

(1) Previous test results, provided the tests are representative of current operating practices at the process unit.

(2) Bench-scale or pilot-scale test data representative of the process under representative operating conditions.

(3) Maximum flow rate or halogen emission rate specified or implied within a permit limit applicable to the process vent.

(4) Design analysis based on accepted chemical engineering principles, measurable process parameters, or physical or chemical laws or properties.

(5) All data, assumptions, and procedures used in the engineering assessment shall be documented.

(c) *Halogenated vent stream determination.* In order to determine whether a vent stream is halogenated, the mass emission rate of halogen atoms contained in organic compounds shall be calculated as specified in paragraphs (c)(1) and (2) of this section.

(1) The vent stream concentration of each organic compound containing halogen atoms (parts per million by volume by compound) shall be determined based on any of the following procedures:

(i) Process knowledge that no halogen or hydrogen halides are present in the vent stream; or

(ii) Applicable engineering assessment as specified in paragraph (b) of this section; or

(iii) Concentration of organic compounds containing halogens measured by Method 18 of appendix A of 40 CFR part 60; or

## Environmental Protection Agency

## § 65.100

(iv) Any other method or data that have been validated according to the applicable procedures in Method 301 of appendix A of 40 CFR part 63.

(2) Equation 85-1 of this section shall be used to calculate the mass emission rate of halogen atoms:

$$E = K_2 V_s \left( \sum_{j=1}^n \sum_{i=1}^m C_j * L_{ji} * M_{ji} \right) \quad (\text{Eq. 85-1})$$

Where:

E = Mass of halogen atoms, dry basis, kilograms per hour.

K<sub>2</sub> = Constant,  $2.494 \times 10^{-6}$  (parts per million)<sup>-1</sup> (kilogram-mole per standard cubic meter) (minute/hour), where standard temperature is 20 °C.

V<sub>s</sub> = Flow rate of gas stream, dry standard cubic meters per minute, determined according to Method 2, 2A, 2C, or 2D of appendix A of 40 CFR part 60, as appropriate, or determined using engineering assessment as specified in paragraph (b) of this section.

n = Number of halogenated compounds j in the gas stream.

j = Halogenated compound j in the gas stream.

m = Number of different halogens i in each compound j of the gas stream.

i = Halogen atom i in compound j of the gas stream.

C<sub>j</sub> = Concentration of halogenated compound j in the gas stream, dry basis, parts per million by volume.

L<sub>ji</sub> = Number of atoms of halogen i in compound j of the gas stream.

M<sub>ji</sub> = Molecular weight of halogen atom i in compound j of the gas stream, kilogram per kilogram-mole.

### § 65.86 Monitoring.

The owner or operator of a transfer rack equipped with a closed vent system and control device pursuant to § 65.83(a)(1) or (2) shall monitor the closed vent system and control device as required under the applicable paragraphs specified in § 65.142(c).

### § 65.87 Recordkeeping provisions.

The owner or operator of a transfer rack shall record that either the verification of U.S. Department of Transportation (DOT) tank certification or Method 27 of appendix A of 40 CFR part 60 testing required in § 65.84(c) has been performed. Various methods for the record of verification can be used, such as a check off on a

log sheet, a list of DOT serial numbers or Method 27 data, or a position description for gate security showing that the security guard will not allow any trucks on-site that do not have the appropriate documentation.

### §§ 65.88–65.99 [Reserved]

## Subpart F—Equipment Leaks

### § 65.100 Applicability.

(a) *Equipment subject to this subpart.* The provisions of this subpart and subpart A of this part apply to equipment that contains or contacts regulated material. Compliance with this subpart instead of the referencing subpart does not alter the applicability of the referencing subpart. This subpart applies only to the equipment to which the referencing subpart applies. This part does not extend applicability to equipment that is not regulated by the referencing subpart.

(b) *Equipment in vacuum service.* Equipment in vacuum service is excluded from the requirements of this subpart.

(c) *Equipment in service less than 300 hours per calendar year.* Equipment intended to be in regulated material service less than 300 hours per calendar year is excluded from the requirements of §§ 65.106 through 65.115 and § 65.117 if it is identified as required in § 65.103(b)(6).

(d) *Lines and equipment not containing process fluids.* Lines and equipment not containing process fluids are not subject to the provisions of this subpart. Utilities and other nonprocess lines, such as heating and cooling systems that do not combine their materials with those in the processes they serve, are not considered to be part of a process unit.